UNITED STATES PATENT AND TRADEMARK OFFICE

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/590,791	HEUER ET AL.
	Examiner	**Art Unit**	
	Quoc A. Tran	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>2</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12/02/2008*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23 and 25-27* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23 and 25-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 December 2008* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Applicant's request for reconsideration of the finality of the rejection of the last

Office action is persuasive (see interview summary dated 05/21/2009), because the last

limitation of claim 1, which was not rejected in the last final office action mailed

02/19/2009 (see final office action dated 02/19/2009 at pages 6-9 and see Applicant's

amendment/remarks dated 12/02/2008 at page 2 lines 16-20, the last limitation of

independent claim 1). The Examiner acknowledges the unaddressed limitation and

hereby vacated the last final office action dated 02/19/2009 and replacing with the

current final office action to include the unaddressed limitation. Since, all claims are

drawn to the same invention and could have been finally rejected on the same grounds

and same art of record.

Thus this is a Final Office Action in response to the Applicant's Remarks filed

12/02/2008. Claims 1-23 and 25-27 are pending and rejected. Claim 24 was previously

cancelled. Claim 1 is independent claim; Priority of Germany No 10 2004 009 617.1

dated ***02/27/2004*** (Siemens).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created

doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

unjustified or improper timewise extension of the "right to exclude" granted by a patent

and to prevent possible harassment by multiple assignees.   A nonstatutory

obviousness-type double patenting rejection is appropriate where the conflicting claims

are not identical, but at least one examined application claim is not patentably distinct

from the reference claim(s) because the examined application claim is either anticipated

by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140

F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29

USPQ2d 2010 (Fed Cir 1993). *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir.

1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ

644 (CCPA 1969);

Claim(s) claims 1-23 and 25-27 are provisionally rejected under the judicially

created doctrine of obviousness-type double patenting as being unpatentable over

claims 11-19 of Pending U.S. Patent Application No. 10/564,601 filed 07/02/2004,

Publication No US 20060212796A1 which was published on 09/21/2006. Although the

conflicting claims are not identical, they are not patentably distinct from each other

because they are both exhibiting similar method for coding a structure document uses

the inheriting relationship of its namespace/schema.

This is a provisional obviousness-type double patenting rejection because the

conflicting claims have not in fact been patented.

Claims 1-23 and 25-27, of current application and Pending U.S. Patent

Application No. 10/564,601 are compared as follows, showing the obviousness of the

teachings of the patent to the claimed invention:

Current Application	US Application 10/564,601
Claims 1-23 and 25-27:	**Claims 11-19:**
A method for coding a structured, document, comprising: [claim 1] generating a plurality of codes using at least one namespace and allocating the plurality of codes for types defined by : carried out, for each namespace, an assignment to further namespace such that at least one assignment information is generated such that at least one inheritance relationship is described between inheriting namespace and bequeathing name spaces; [see claim 1] and forming the assignment information of the inheriting name space from a list of codes of the basic types of header types of the inheriting name space, with basic types being types from which the header type originates directly or from which a header type originates, which in turn is the basic type of a header type of the inheriting name space [claim 1]	A method for coding a structured document, comprising the steps of: [see claim 11] generating a plurality of codes using a plurality of namespaces comprising data types; defining elements in one or more namespaces; assigning independent codes for at least one namespace having defined elements, wherein the independent codes are generated from other namespaces; wherein the independent codes within a given namespace are assigned for data types comprising the following steps: [see claim 11] sorting data types of a namespace, which have been inherited from data types of other namespaces, in a list according to global TypeCodes of the respective basic data types, wherein the data types include the data types in other namespaces from which the sorted data types have been inherited; sorting lexicographically data types of a namespace which have been inherited from a specified basic data type of a specific other namespace; sorting the data types of a namespace which have not been inherited from a data type of another namespace into the existing list of data types; assigning the independent codes in the order of the list to the data types of the namespace [see claim 11]
Claims 2-23 and 25-27	Claims 11-19

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 21-23 and 27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 21-23 and 27:

In summary, Claims 21-23 and 27 recite a *"coding and decoding device."* The recited *"coding device"* and "*decoding device*" for coding and decoding XML-based document such MPEG-7 utilizing instances of schemas/namespaces are illustrated at Figure 1, and the Specification expressly states, "*a coding device and a decoding device to implement the inventive coding and/or decoding method. An example embodiment of the invention also includes a coding and decoding device, with which an embodiment of the inventive coding method and an embodiment of the inventive decoding method can be implemented"* see Specification → Page 11, Paragraph [0039]. The Examiner interprets **coding device** and **decoding device** described herein **may be performed in** either **hardware** or **software**, since it is not clearly define the separation of either hardware or software. Thus, for purposes of examination, the examiner interprets the recited *"coding device"* and "*decoding device*" for coding and decoding XML-based document such MPEG-7 utilizing instances of schemas/namespaces to comprise only computer software. Accordingly, the *"coding device"* and "*decoding device*"" recited in Claim(s) 21-23 and 27 is software *per se.*

Computer software is not a process, a machine, a manufacture or a composition

of matter, as set forth in 35 U.S.C. 101. Accordingly, the claims do not recite statutory

subject matter.

In the interest of compact prosecution, the application is further examined against

the prior art, as stated below, upon the assumption that the applicants may overcome

the above stated rejections under 35 U.S.C. 101.

Applicant may obviate the rejection by cancelling the claims.

Claims Rejection – 35 U.S.C. 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described
as set forth in section 102 of this title, if the differences between the subject matter sought to
be patented and the prior art are such that the subject matter as a whole would have been
obvious at the time the invention was made to a person having ordinary skill in the art to which
said subject matter pertains. Patentability shall not be negatived by the manner in which the
invention was made.

Claims 1-23 and 25-27 are rejected under 35 U.S.C. 103(a) as being

unpatentable over **Seyrat et al.,** (US 20040068696A1 filed 02/04/2002) [hereinafter

"Seyrat"], in view of **Mory et al.,** (US 20020138517A1 filed 10/17/2001) [hereinafter

"Mory"].

Regarding **independent claim 1**, Seyrat teaches:

A method for coding a structured, document, comprising:

(At Fig. 2 and Page 4 Paragraph 90→ Seyrat discloses this limitation that is a MPEG-7

(item 10) comprises a schema compilator (item 11) designed to receive and process

schemas (item 9) such as XML schemas [i.e., namespace- see the applicant 's

disclosure at Page 2 Paragraph [0007]], in order to obtain a binary syntax code (item

13) [i.e., coding] that is executed to decode encoded documents 7 [i.e., coding a

structure] that are applied in input of the decoder 10, the latter providing in output

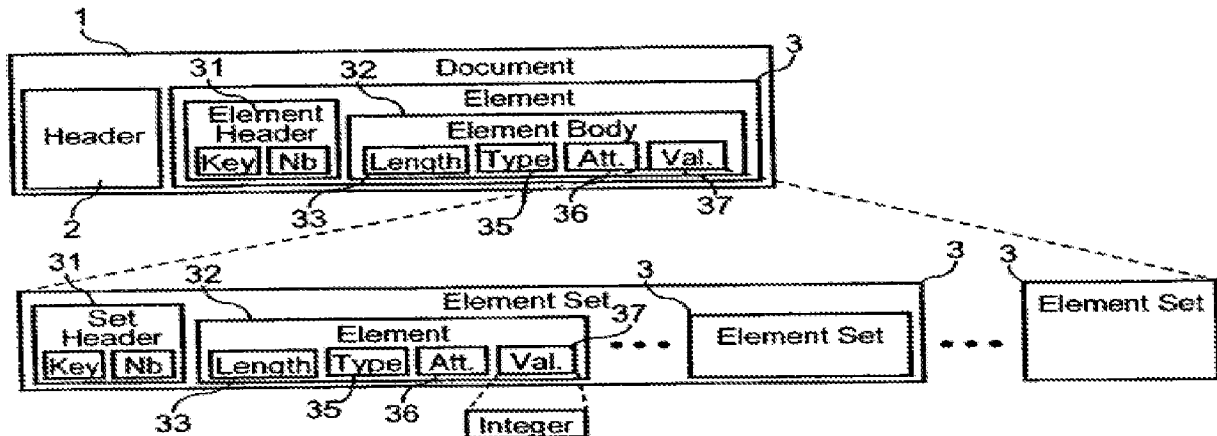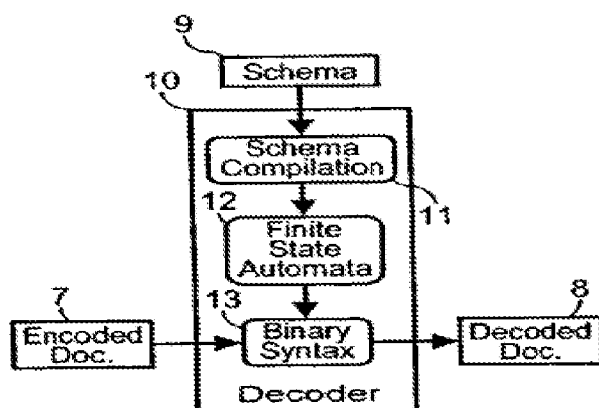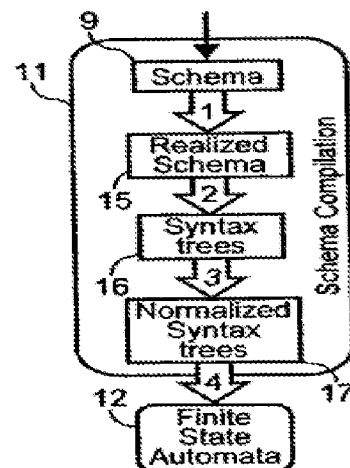decoded documents 8 in format XML for example.)

Fig. 1

Fig. 2

Fig. 2a

and allocating the plurality of codes for types defined by

namespaces;

(At figure(s) 1, 2-2a and at page 4 Paragraph(s) [0079-0090]→ Seyrat discloses this

limitation, as clearly indicated in the cited text [e.g. the binary sequence encoding each

element of the document comprises a content field containing an encoded value of the

element and a length field placed before the content field and containing an encoded

value of a length of the content field and type (e.g. allocating).

carried out, for each namespace, an assignment to further

namespace such that at least one assignment information is generated

such that at least one inheritance relationship is described between

inheriting namespace and bequeathing name spaces,

(See Fig. 2-2a and Page 4 Paragraph 90→ Page 5 Paragraph 93, Seyrat discloses the

XML binary syntax code is addressable based upon the inheritance relationship

between inheriting schema and the schema realization of flattening the type

inheritances and in solving the Namespace supported (e.g., carried out). Also Seyrat

further disclose encoding the document using said first and second schemas into a

binary stream comprising for each elements of the document a binary sequence

encoding the element, and inserting in the binary sequence encoding the derived

element a reference designating the first schema in which the structure of the derived

element is defined, said reference designating the first schema being defined in a

schema reference list containing references to all schemas used for encoding the

document, the schema reference list being made accessible to the decoder. This
generally is disclosed at the [Abstract of Seyrat].

**forming the assignment information of the inheriting name space
from a list of codes of the basic types of header types of the inheriting
name space, with basic types being types from which the header type
originates directly or from which a header type originates, which in turn is
the basic type of a header type of the inheriting name space.**

(See Fig. 1 and 2-2a and Page 4 Paragraph [0092]→ Seyrat discloses the schema
reference list comprising references to all schemas uses for encoding the structured
document is inserted in a header associated to the binary stream encoding the
structured document (e.g., forming the assignment information). Also Seyrat further
disclose the element set header (item 31) comprises: a header, element header,
element (length type attribute and value) (e.g., the basic types of header types), which
are inheriting to the next high hierarchical level set header [see Seyrat at Fig. 1 and 2-
2a and at paragraph [0079-0089]. This allows a MPEG-7 decoder 10 comprises a
schema compilator 11 designed to receive and process schemas 9 such as XML
schemas (namespace, in order to obtain a binary syntax code 13 that is executed to
decode encoded documents 7 that are applied in input of the decoder 10, [see Seyrat at
page 4 paragraph [0091].

In addition, Seyrat does not expressly teach, but Mory teaches:

generating a plurality of codes using at least one namespace;

(See Page 3 Paragraph 55 → Page 5 Paragraph 85, Mory illustrates in Example 3 [i.e.,

plurality of codes] the coding of XML schema being generated based upon the Element

Declaration of Table 1-->Table 3 that allows stating the unique and unambiguous

numbering of all possible instances of the xml schema [0053], also Mory illustrates in

ARRAY 1 [0085] an example of an instance of the schema which described in Example

3 [0060], which is one of the plurality of instances of schema as shown in Example 3

Paragraph [0060].)

This allows binary format for MPEG-7 instances [the Title]. This interpretation is

supported by the applicant's specification and drawing, which is stated, "*XML schema*

definition are known…. schema A is defined in the upper part, as shown by a curly

bracket, and on the other hand a schema X is defined in the lower part, similarly shown

by a curly bracket. The schema X in turn uses data types, which have been imported

from the schema A" see disclosure at [Fig. 2a and Fig. 2b and Paragraph [0042] Pages

12-13]. Therefore, the artisan would have well appreciated that Mory's method of binary

format for MPEG-7 instances based upon XML schema being generated based upon

the Element Declaration which is stated the unique and unambiguous numbering of all

possible instances of the schema is equivalent to generating a plurality of codes using

at least one namespace as cited in independent claim 1.

Accordingly, It would have been obvious to one of ordinary skill in the art at the

time of the invention to modify Seyrat's method for encoding the XNL document such as

MPEG-7 instances based upon XML schema, to includes a means of generating a

plurality of codes using at least one namespace as taught by Mory, because Seyrat and

Mory are both form the analogous art of encoding and decoding of XML documents

such as MPEG-7 instances based upon XML schema; to produce predictable result of

said more efficient to be processed and less costly to be transmitted utilizing ISO/IEC

15938-1 and more particularly MPEG-7 (Moving Picture Expert Group) particularly

designed to deal with highly structured data, such as multimedia data [see Seyrat at

Page 1 Paragraph [0008]].

Claim 2,

Seyrat and Mory teach the method of claim 1 and further comprise:

wherein a subset comprising addressable types of a name

space is determined based on an initial basic type on the basis of an

inheritance relationship between the name spaces and the

inheritance relationships in a name space of the basic type and the

inheritance relationships in the name space of the subset.

(See Fig. 2-2a and Page 4 Paragraph 90→ Page 5 Paragraph 93, Seyrat discloses the

XML binary syntax code is addressable based upon the inheritance relationship

between inheriting schema and the schema type inheritances and in solving the

Namespace supported. Also Seyrat further disclose encoding the document using said

first and second schemas [i.e., subset schema/namespace] into a binary stream

comprising for each elements of the document a binary sequence encoding the

element, and inserting in the binary sequence encoding the derived element a reference

designating the first schema in which the structure of the derived element is defined,

said reference designating the first schema being defined in a schema reference list

containing references to all schemas used for encoding the document, the schema

reference list being made accessible to the decoder. This generally is disclosed at the

[Abstract of Seyrat].)

Claim 3,

     Seyrat and Mory teach the method of claim 2 and further comprise:

          wherein the addressable subset is determined based on an

          initial basic type by establishing the basic types of the bequeathing

          name space.

(See the Abstract→Seyrat discloses a schema reference list containing references to all

schemas used for encoding the document, the schema reference list being made

accessible to the decoder a schema reference list containing references to all schemas

used for encoding the document, the schema reference list being made accessible to

the decoder. Also Seyrat further disclose encoding the document using said first and

second schemas [i.e., subset schema/namespace] into a binary stream comprising for

each elements of the document a binary sequence encoding the element [see the

Abstract].

See also Fig. 2-2a and Page 4 Paragraph 90→ Page 5 Paragraph 93, Seyrat

discloses the XML binary syntax code is allocated based upon the inheritance

relationship between inheriting schema and the schema realization of flattening the type

inheritances and in solving the Namespace supported.)

Claim 4,

Seyrat and Mory teach the method of claim 3 and further comprise:

> **wherein, based on the initial basic type for determining the**
>
> **subset, header types are determined in the inheriting name space,**
>
> **for which basic types are identified from the bequeathing name**
>
> **space by use of the assignment information, the initial basic type**
>
> **being a basic type of the basic types of the bequeathing name space.**

(See Fig. 2-2a and Page 4 Paragraph 90→ Page 5 Paragraph 93, Seyrat discloses the

XML binary syntax code is allocated based upon the inheritance relationship between

inheriting schema and the schema realization of flattening the type inheritances and in

solving the Namespace supported. Also Seyrat further disclose encoding the document

using said first and second schemas [i.e., subset schema/namespace] into a binary

stream comprising for each element. This generally is disclosed at the [Abstract of

Seyrat].

Also see Paragraph 33-34→ Seyrat discloses the schema reference list

comprising references to all schemas used for encoding the structured document is

inserted in a header associated to the binary stream encoding the structured document,

wherein basic types are identified from the committed name space by use of the

assignment information.)

Claim 5,

Seyrat and Mory teach the method of claim 1 and further comprise:

wherein the assignment information assigned to the inheriting

name spaces is stored together with the respective name space in a

first device carrying out at least one of the coding and decoding.

(See Paragraph 33-34→ Seyrat discloses the schema reference list comprising

references to all schemas used for encoding the structured document is inserted in a

header associated to the binary stream encoding the structured document, wherein

basic types are identified from the committed name space by use of the assignment

information. Also Seyrat further discloses MPEG-7 (item 10 of Fig. 2) comprises a

schema compilator (item 11 of Fig. 2) designed to receive and process schemas (item 9

of Fig. 2) such as XML schemas [i.e., namespace- see the applicant 's disclosure at

Page 2 Paragraph [0007]], in order to obtain a binary syntax code (item 13) [i.e., coding]

that is executed to decode encoded documents 7 [i.e., coding a structure] that are

applied in input of the decoder 10, the latter providing in output decoded documents 8 in

format XML for example.[Fig. 2 and Page 4 Paragraph 90→ Page 5 Paragraph 85].)

Claim 6,

Seyrat and Mory teach the method of claim 5 and further comprise:

wherein the assignment information assigned to the inheriting

name spaces is generated in a second device and transmitted

together with the respective name space, in a first device carrying

out at least one of the coding and decoding.

(See Paragraph 33-34→ Seyrat discloses the schema reference list comprising

references to all schemas used for encoding the structured document is inserted in a

header associated to the binary stream encoding the structured document, wherein

basic types are identified from the committed name space by use of the assignment

information. Also Seyrat further discloses MPEG-7 (item 10 of Fig. 2) comprises a

schema compilator (item 11 of Fig. 2) designed to receive and process schemas (item 9

of Fig. 2) such as XML schemas [i.e., namespace- see the applicant 's disclosure at

Page 2 Paragraph [0007]], in order to obtain a binary syntax code (item 13) [i.e., coding]

that is executed to decode encoded documents 7 [i.e., coding a structure] that are

applied in input of the decoder 10, the latter providing in output decoded documents 8 in

format XML for example.[Fig. 2 and Page 4 Paragraph 90→ Page 5 Paragraph 85].

This allows computer networks, which is the main media for communications.

Computers can now be plugged to a shared network, operating systems allow

applications to easily exchange messages, Internet infrastructure allows computers to

find their interlocutor, applications use complex algorithms to synchronize themselves

[i.e., device to device]. This is generally described at [0004].)

Claim 7,

Seyrat and Mory teach the method of claim 1 and further comprise:

> **wherein respectively separate codes, which are independent of at least one of other schemas and name spaces, for the elements at least one of defined and declared in at least one of the schemas and name spaces in the groups of at least one of schemas and name spaces, are allocated for at least one of a schema a name space for a group of at least one of schemas and name spaces.**

(See Fig. 2-2a and Page 4 Paragraph 90→ Page 5 Paragraph 93, Seyrat discloses the XML binary syntax code is allocated based upon the inheritance relationship between inheriting schema and the schema realization of flattening the type inheritances and in solving the Namespace supported. Also Seyrat further disclose encoding the document using said first and second schemas into a binary stream comprising for each elements of the document a binary sequence encoding the element, and inserting in the binary sequence encoding the derived element a reference designating the first schema in which the structure of the derived element is defined, said reference designating the first schema being defined in a schema reference list containing references to all schemas used for encoding the document, the schema reference list being made accessible to the decoder. This generally is disclosed at the [Abstract of Seyrat].

Claim 8,

Seyrat and Mory teach the method of claim 7 and further comprise:

wherein, to identify the at least one of schema name space and the group of at least one of schemas and name spaces, the separate codes are sub-divided into corresponding address areas.

(See Fig. 2-2a and Page 4 Paragraph 90→ Page 5 Paragraph 93, Seyrat discloses the XML binary syntax code is allocated based upon the inheritance relationship between inheriting schema and the schema realization of flattening the type inheritances and in solving the Namespace supported. Also Seyrat further disclose encoding the document using said first and second schemas into a binary stream comprising for each elements of the document a binary sequence encoding the element, and inserting in the binary sequence encoding the derived element a reference designating the first schema in which the structure of the derived element is defined, said reference designating the first schema being defined in a schema reference list containing references to all schemas used for encoding the document, the schema reference list being made accessible to the decoder. This generally is disclosed at the [Abstract of Seyrat].

Claim 9,

Seyrat and Mory teach the method of claim 7 and further comprise:

wherein the separate codes respectively comprise a local code at least one of relating to at least one of the schema and the name space and relating to at least one of the group of schemas and name

spaces and an identification code to identify at least one of the schema, and name space and the group of at least one of schemas and name spaces.

(See Fig. 2-2a and Page 4 Paragraph 90→ Page 5 Paragraph 93, Seyrat discloses the XML binary syntax code is allocated based upon the inheritance relationship between inheriting schema and the schema realization of flattening the type inheritances and in solving the Namespace supported. Also Seyrat further disclose encoding the document using said first and second schemas into a binary stream comprising for each elements of the document a binary sequence encoding the element, and inserting in the binary sequence encoding the derived element a reference designating the first schema in which the structure of the derived element is defined, said reference designating the first schema being defined in a schema reference list containing references to all schemas used for encoding the document, the schema reference list being made accessible to the decoder. This generally is disclosed at the [Abstract of Seyrat].

Claim 10,

Seyrat and Mory teach the method of claim 7 and further comprise:

wherein the separate codes are generated for at least one of global elements, substitution groups and data types.

(See Page 3 Paragraph 55 → Page 5 Paragraph 85, Mory illustrates in Example 3 [i.e., plurality of codes] the coding of XML schema being generated based upon the Element Declaration of Table 1-->Table 3 that allows stating the unique and unambiguous

numbering of all possible instances of the xml schema [0053] (i.e., global elements),

also Mory illustrates in ARRAY 1 [0085] an example of an instance of the schema which

described in Example 3 [0060], which is one of the plurality of instances of schema as

shown in Example 3 Paragraph [0060]. Also see [Paragraph 166] Mori discloses certain

primitive data types can imply a large amount of bytes (e.g. free text annotation or

movie scripts), that is propose to code the data size using a variable number of bytes.)

Accordingly, It would have been obvious to one of ordinary skill in the art at the

time of the invention to modify Seyrat's method for encoding the XNL document such as

MPEG-7 instances based upon XML schema, to includes a means of generating a

plurality of codes using at least one of global elements, substitution groups and data

types as taught by Mory, because Seyrat and Mory are both form the analogous art of

encoding and decoding of XML documents such as MPEG-7 instances based upon

XML schema; to produce predictable result of said more efficient to be processed and

less costly to be transmitted utilizing ISO/IEC 15938-1 and more particularly MPEG-7

(Moving Picture Expert Group) particularly designed to deal with highly structured data,

such as multimedia data [see Seyrat at Page 1 Paragraph [0008]].

Claim 11,

Seyrat and Mory teach the method of claim 10 and further comprise:

wherein separate codes are generated for data types type

codes such that within the inheritance tree of a name space the data

type adjacent to a first data type in the same name space is at a code

interval in respect of the first data type, said code interval

corresponding to the number of data types derived from the first

data type in this name space.

(See Page 3 Paragraph 55 → Page 5 Paragraph 85, Mory illustrates in Example 3 [i.e.,

plurality of codes] the coding of XML schema being generated based upon the Element

Declaration of Table 1-->Table 3 that allows stating the unique and unambiguous

numbering of all possible instances of the xml schema [0053], also Mory illustrates in

ARRAY 1 [0085] an example of an instance of the schema which described in Example

3 [0060], which is one of the plurality of instances of schema as shown in Example 3

Paragraph [0060]. Also see [Paragraph 166] Mori discloses certain primitive data types

can imply a large amount of bytes (e.g. free text annotation or movie scripts), that is

propose to code the data size using a variable number of bytes.)

Accordingly, It would have been obvious to one of ordinary skill in the art at the

time of the invention to modify Seyrat's method for encoding the XNL document such as

MPEG-7 instances based upon XML schema, to includes a means of generating

separate codes for data types type codes such that within the inheritance tree of a

name space the data type adjacent to a first data type in the same name space is at a

code interval in respect of the first data type, said code interval corresponding to the

number of data types derived from the first data type in this name space as taught by

Mory, because Seyrat and Mory are both form the analogous art of encoding and

decoding of XML documents such as MPEG-7 instances based upon XML schema; to

produce predictable result of said more efficient to be processed and less costly to be

transmitted utilizing ISO/IEC 15938-1 and more particularly MPEG-7 (Moving Picture

Expert Group) particularly designed to deal with highly structured data, such as

multimedia data [see Seyrat at Page 1 Paragraph [0008]].

Claim 12,

 Seyrat and Mory teach the method of claim 7 and further comprise:

  wherein the separate codes within a given name space are

  allocated according to a method comprising,

(At Fig. 2 and Page 4 Paragraph 90→ Seyrat discloses this limitation that is a MPEG-7

(item 10) comprises a schema compilator (item 11) designed to receive and process

schemas (item 9) such as XML schemas [i.e., namespace- see the applicant 's

disclosure at Page 2 Paragraph [0007]].)

  sorting all data types of a name space, which were bequeathed

  from data types of other name spaces,

(Seyrat discloses the XML binary syntax code is allocated based upon the inheritance

relationship between inheriting schema (i.e., bequeathed) and the schema realization

of flattening the type inheritances and in solving the Namespace supported [See Fig. 2-

2a and Page 4 Paragraph 90→ Page 5 Paragraph 93].)

in a list in the sequence of global type codes of the respective

basic data types as defined in the MPEG-7 standard, the basic data

types being the data types in other name spaces, from which the

sorted data types were bequeathed; sorting data types of a name

space, which were bequeathed from a specific basic data type of a

specific other name space, are lexicographically in each instance;

sorting all the data types of a name space, which were not

bequeathed from a data type of another name space, according to

the sequence defined in the MPEG-7 standard into the existing list of

data types; and allocating the separate codes in list sequence to the

data types of the name spaces.

(At Fig. 2 and Page 4 Paragraph 90→ Seyrat discloses this limitation that is a MPEG-7

(item 10) comprises a schema compilator (item 11) designed to receive and process

schemas (item 9) such as XML schemas [i.e., namespace- see the applicant 's

disclosure at Page 2 Paragraph [0007]], in order to obtain a binary syntax code (item

13) [i.e., coding] that is executed to decode encoded documents 7 [i.e., coding a

structure] that are applied in input of the decoder 10, the latter providing in output

decoded documents 8 in format XML for example. Also Seyrat further discloses

encoding the document using said first and second schemas into a binary stream

comprising for each elements of the document a binary sequence encoding the

element, and inserting in the binary sequence encoding the derived element a reference

designating the first schema in which the structure of the derived element is defined,

said reference designating the first schema being defined in a schema reference list

containing references to all schemas used for encoding the document, the schema

reference list being made accessible to the decoder. This generally is disclosed at the

[Abstract of Seyrat].

Claim 13,

Claim 13 is fully incorporated similar subject of claim 1 cited above, and

are similarly rejected along the same rationale. Thus, Seyrat and Mory disclose

every limitation of Claim 13 and provide proper reasons to combine, as indicated

in the above rejections for Claim 1.

In addition Seyrat teaches:

Seyrat and Mory teach the method of claim 1 and further comprise:

decoding a document previously coded according to a method

as claimed in claim 1,

(At the Abstract→ Seyrat discloses an encoding method for enabling a decoder to

decode a structured document having a structure defined in a first schema not

accessible to the decoder and resulting from a change of a second schema accessible

to the decoder.)

Claim 14,

Seyrat and Mory teach the method of claim 11 and further comprise:

wherein, to decode a binary type code, the code length of the

separate codes of the binary type codes is determined from the

number of derived data types.

(At the Abstract→ Seyrat discloses an encoding method for enabling a decoder to

decode a structured document having a structure defined in a first schema not

accessible to the decoder and resulting from a change of a second schema accessible

to the decoder.

See also Seyrat at Paragraph 17-18, discloses the binary sequence encoding

each element of the document comprises a content field containing an encoded value of

the element and a length field placed before the content field and containing an

encoded value of a length of the content field, wherein the derived information element

is associated in the first schema to a structure type which is restricted with respect to

the structure type of the corresponding information element in the second schema, the

binary sequence encoding the derived element comprising a content field and

appended to the content field, a reference to the first schema and a reference to the

structure type of the derived element, defined in the second schema.)

Claim 15,

Seyrat and Mory teach the method of claim 4 and further comprise:

wherein, to decode a specific type code, the sub-tree of the inheritance tree of the name space, in which the specific type code is located, is determined from the code intervals between adjacent data types.

(At Paragraph 17-18→ Seyrat discloses the binary sequence encoding each element of the document comprises a content field containing an encoded value of the element and a length field placed before the content field and containing an encoded value of a length of the content field, wherein the derived information element is associated in the first schema to a structure type which is restricted with respect to the structure type of the corresponding information element in the second schema, the binary sequence encoding the derived element comprising a content field and appended to the content field, a reference to the first schema and a reference to the structure type of the derived element, defined in the second schema. Also Seyrat further discloses at fig. 1 and fig. 2 the binary format of a tree structure of a structured document according to MPEG-7 standard and a MPEG-7 decoder.)

Claim 16,

Claim 16 is fully incorporated similar subject of claim 1 cited above, and are similarly rejected along the same rationale. Thus, Seyrat and Mory disclose

every limitation of Claim 16 and provide proper reasons to combine, as indicated

in the above rejections for Claim 1.

In addition Seyrat teaches:

Decoding an XML-based document,

(At Paragraph [0002]→ Seyrat described a method for encode and decode relates in

general to the field of computer systems, and more particularly to a method and system

for the compression of structured documents using document descriptions that

conforms to a generalized markup language, such as SGML (Standard Generalized

Markup Language) and XML (Extensible Markup Language).)

Claim 17,

Claim 17 is fully incorporated similar subject of claim 11 cited above, and

are similarly rejected along the same rationale. Thus, Seyrat and Mory disclose

every limitation of Claim 17 and provide proper reasons to combine, as indicated

in the above rejections for Claim 113.

In addition Seyrat teaches:

a method for decoding an XML-based document comprising:

(At Paragraph [0002]→ Seyrat described a method for encode and decode relates in

general to the field of computer systems, and more particularly to a method and system

for the compression of structured documents using document descriptions that

conforms to a generalized markup language, such as SGML (Standard Generalized

Markup Language) and XML (Extensible Markup Language).

wherein, to decode a binary type code, the code length of the

separate codes of the binary type codes is determined from the

number of derived data types,

(At Paragraph 17-18, discloses the binary sequence encoding each element of the

document comprises a content field containing an encoded value of the element and a

length field placed before the content field and containing an encoded value of a length

of the content field, wherein the derived information element is associated in the first

schema to a structure type which is restricted with respect to the structure type of the

corresponding information element in the second schema, the binary sequence

encoding the derived element comprising a content field and appended to the content

field, a reference to the first schema and a reference to the structure type of the derived

element, defined in the second schema.)

Claim 18,

Claim 18 is fully incorporated similar subject of claim 11 cited above, and

are similarly rejected along the same rationale. Thus, Seyrat and Mory disclose

every limitation of Claim 17 and provide proper reasons to combine, as indicated

in the above rejections for Claim 11.

In addition Seyrat teaches:

a method for decoding an XML-based document comprising:

(At Paragraph [0002]→ Seyrat described a method for encode and decode relates in

general to the field of computer systems, and more particularly to a method and system

for the compression of structured documents using document descriptions that

conforms to a generalized markup language, such as SGML (Standard Generalized

Markup Language) and XML (Extensible Markup Language).

wherein, to decode a specific type code, the sub-tree of the

inheritance tree of the name space, in which the specific type code is

located, code length is determined from the code intervals between

adjacent data types.,

(At Paragraph 17-18, discloses the binary sequence encoding each element of the

document comprises a content field containing an encoded value of the element and a

length field placed before the content field and containing an encoded value of a length

of the content field, wherein the derived information element is associated in the first

schema to a structure type which is restricted with respect to the structure type of the

corresponding information element in the second schema, the binary sequence

encoding the derived element comprising a content field and appended to the content

field, a reference to the first schema and a reference to the structure type of the derived

element, defined in the second schema.

Also Seyrat further discloses at fig. 1 and fig. 2 the binary format of a tree

structure of a structured document according to MPEG-7 standard and a MPEG-7

decoder.)

Claim 19,

Claim 19 is fully incorporated similar subject of claim 11 cited above, and

are similarly rejected along the same rationale. Thus, Seyrat and Mory disclose

every limitation of Claim 17 and provide proper reasons to combine, as indicated

in the above rejections for Claim 11.

In addition Seyrat teaches:

a method for decoding an XML-based document comprising:

(At Paragraph [0002]→ Seyrat described a method for encode and decode relates in

general to the field of computer systems, and more particularly to a method and system

for the compression of structured documents using document descriptions that

conforms to a generalized markup language, such as SGML (Standard Generalized

Markup Language) and XML (Extensible Markup Language).

wherein, to determine the basic types, which originate from an

initial basic type, code length is determined from the code intervals

between adjacent data types.

(At Paragraph 17-18, discloses the binary sequence encoding each element of the

document comprises a content field containing an encoded value of the element and a

length field placed before the content field and containing an encoded value of a length

of the content field, wherein the derived information element is associated in the first

schema to a structure type which is restricted with respect to the structure type of the

corresponding information element in the second schema, the binary sequence

encoding the derived element comprising a content field and appended to the content

field, a reference to the first schema and a reference to the structure type of the derived

element, defined in the second schema.)

Claim 20,

>   Claim 19 is fully incorporated similar subject of claim 11 cited above, and

are similarly rejected along the same rationale. Thus, Seyrat and Mory disclose

every limitation of Claim 17 and provide proper reasons to combine, as indicated

in the above rejections for Claim 11.

In addition Seyrat teaches:

>   **a method for decoding an XML-based document comprising:**

(At Paragraph [0002]→ Seyrat described a method for encode and decode relates in

general to the field of computer systems, and more particularly to a method and system

for the compression of structured documents using document descriptions that

conforms to a generalized markup language, such as SGML (Standard Generalized

Markup Language) and XML (Extensible Markup Language).

>   **wherein, to determine the number of types in the subset, code**

>   **length is determined based on the header types from the code**

>   **intervals between adjacent header types.**

(at Paragraph [0033]→ Seyrat discloses the schema reference list comprising

references to all schemas used for encoding the structured document is inserted in a

header associated to the binary stream encoding the structured document.

Also at Paragraph 17-18, discloses the binary sequence encoding each element

of the document comprises a content field containing an encoded value of the element

and a length field placed before the content field and containing an encoded value of a

length of the content field, wherein the derived information element is associated in the

first schema to a structure type which is restricted with respect to the structure type of

the corresponding information element in the second schema, the binary sequence

encoding the derived element comprising a content field and appended to the content

field, a reference to the first schema and a reference to the structure type of the derived

element, defined in the second schema.)

Claim 21,

Claim 21 recites a coding device configured to perform the method of

claim 1. Thus, Seyrat and Mori disclose every limitation of Claim 21 and provide

proper reasons to combine, as indicated in the above rejections for Claim 1-Also

see Seyrat at [0002], discloses a computer systems, and more particularly to a

method and system for the compression of structured documents using

document descriptions that conforms to a generalized markup language, such as

SGML (Standard Generalized Markup Language) and XML (Extensible Markup

Language). Such documents may contain multimedia information. Also Seyrat

further discloses at fig. 1 and fig. 2 the binary format of a tree structure of a

structured document according to MPEG-7 standard and a MPEG-7 decoder and

encoder.)

Claim 22,

Claim 22 recites a coding device configured to perform the method of

claim 13. Thus, Seyrat and Mori disclose every limitation of Claim 22 and

provide proper reasons to combine, as indicated in the above rejections for Claim

13-Also see Seyrat at [0002], discloses a computer systems, and more

particularly to a method and system for the compression of structured documents

using document descriptions that conforms to a generalized markup language,

such as SGML (Standard Generalized Markup Language) and XML (Extensible

Markup Language). Such documents may contain multimedia information. Also

Seyrat further discloses at fig. 1 and fig. 2 the binary format of a tree structure of

a structured document according to MPEG-7 standard and a MPEG-7 decoder

and encoder.)

Claim 23,

Claim 23 recites a coding and decoding device configured to perform the

method of claim 21. Thus, Seyrat and Mori disclose every limitation of Claim 23

and provide proper reasons to combine, as indicated in the above rejections for

Claim 21-Also see Seyrat at [0002], discloses a computer systems, and more

particularly to a method and system for the compression of structured documents

using document descriptions that conforms to a generalized markup language,

such as SGML (Standard Generalized Markup Language) and XML (Extensible

Markup Language). Such documents may contain multimedia information. Also

Seyrat further discloses at fig. 1 and fig. 2 the binary format of a tree structure of

a structured document according to MPEG-7 standard and a MPEG-7 decoder

and encoder.)

Claims 25-26, Seyrat teaches:

a method for coding and decoding an XML-based document

comprising:

(At Paragraph [0002]→ Seyrat described a method for encode and decode relates in

general to the field of computer systems, and more particularly to a method and system

for the compression of structured documents using document descriptions that

conforms to a generalized markup language, such as SGML (Standard Generalized

Markup Language) and XML (Extensible Markup Language).

Claim 27,

Claim 27 recites a coding and decoding device configured to perform the

method of claim 22. Thus, Seyrat and Mori disclose every limitation of Claim 27

and provide proper reasons to combine, as indicated in the above rejections for

Claim 22-Also see Seyrat at [0002], discloses a computer systems, and more

particularly to a method and system for the compression of structured documents

using document descriptions that conforms to a generalized markup language,

such as SGML (Standard Generalized Markup Language) and XML (Extensible

Markup Language). Such documents may contain multimedia information. Also

Seyrat further discloses at fig. 1 and fig. 2 the binary format of a tree structure of

a structured document according to MPEG-7 standard and a MPEG-7 decoder

and encoder.)

It is noted that any citations to specific, pages, columns, lines, or figures in the

prior art references and any interpretation of the references should not be considered to

be limiting in any way. A reference is relevant for all it contains and may be relied upon

for all that it would have reasonably suggested to one having ordinary skill in the art.

See, MPEP 2123.

Response to Arguments

Brief description of cited prior art:

Seyrat discloses a ***MPEG-7 decoder*** 10 comprises a schema compilator 11

designed to receive and process schemas 9 such as XML schemas, in order to obtain a

binary syntax code 13 that is executed to ***decode/encoded xml documents*** 7. Each

complex type defined in the processed schema is transformed into a finite state

automaton expressing the complex type coding rules. The input encoded document 7 is

applied to the decoder in the form of a binary stream on which the binary syntax code is

executed using *type inheritances* and in solving the *Namespace support*. This phase

generates a realized schema 15. The second phase consists in *generating a syntax*

tree from each complex type. This is generally disclosed at [Para 0090 through 0092

and Figure 2 and 2a of Seyrat].

Mory discloses a method for *encoding/decoding* XML like document which is

an instance of XML-like schema using table derived from said schema, said table

containing identification information for solely identifying each description element in a

hierarchical level, and structural information for retrieving any child description element

from its parent description element, and scanning a hierarchical memory representation

of the instance from parent description elements to child description elements until

reaching the description element to be encoded, and retrieving the identification

information of each scanned description element, encoding said description element to

be encoded as a fragment comprising said content and a sequence of the retrieved

identification information [e.g., allocating the codes types utilized XML-like schema].

Applications: XML; XML-schema; MPEG-7 [e.g., generating a plurality of codes using at

least one namespace]. See Mory at the Abstract and at page 3 paragraph 55 through

page 5 paragraph 85 also at table 1→table 3.

In addition, the Examiner noted the Specification expressly states, "The term

"name space" is hereafter used as a synonym for the term "schema"" (see Page

2, Paragraph 0007, third sentence).

<u>Response to Remarks:</u>

Beginning on page 8/11 of the Remarks (hereinafter the remarks), Applicant argues the following issues, which are accordingly addressed below.

<u>Regarding claims Double Patent Rejection:</u>

As stated in the remarks at page 8, the "Double Patent Rejection", "*Applicants acknowledge this provisional rejection, and will take the appropriate steps to address this rejection once the claims in this application and the claims in pending Application 10/564,601 are indicated as including allowable subject matter since this provisional rejection is based on claims that may change.*" Thus the Examiner respectfully maintains the Double Paten Rejection at least at this time [see above rejection for details].

<u>Regarding 101 rejections of claims 21-23 and 25-27:</u>

Applicants asserts that "*the method of coding and decoding structured documents as recited in the claims may arguably be performed by computer software; the Examiner will readily appreciate that such computer software may not be executed without the necessary hardware. Accordingly, even though the specification does not explicitly disclose a hardware device to implement the methods of coding and/or decoding structured documents as recited in, for example, claims 1, 13, 21 and 22, one of ordinary skill in the art will readily understand that to execute such computer software would require the necessary hardware device and it is this hardware device to which*

claims 21-23 and 27 are directed." See the remarks at page 8 the "Rejection under 35

U.S.C. § 101".

The Examiner disagrees.

As discuss above and in previously presented Office Action mailed 09/04/2008.

As recognized by the Examiner, claims 21-23 and 27 recite a "*method*" comprising a

"*coding and decoding device*". The recited "*coding device*" and "*decoding device*" for

coding and decoding XML-based document such MPEG-7 utilizing instances of

schemas/namespaces are illustrated at Figure 1, and the Specification expressly states,

"*a coding device and a decoding device to implement the inventive coding and/or*

decoding method. An example embodiment of the invention also includes a coding and

decoding device, with which an embodiment of the inventive coding method and an

embodiment of the inventive decoding method can be implemented" see Specification

→ Page 11, Paragraph [0039]. The Examiner interprets **coding device** and **decoding**

device described herein **may be performed in** either **hardware** or **software**, since it is

not clearly define the separation of either hardware or software. Thus, for purposes of

examination, the examiner interprets the recited "*coding device*" and "*decoding device*"

for coding and decoding XML-based document such MPEG-7 utilizing instances of

schemas/namespaces to comprise only computer software. Accordingly, the "*coding*

device" and "*decoding device*"" recited in Claim(s) 21-23 and 27 is **software** ***per se***.

Computer software is not a process, a machine, a manufacture or a composition

of matter, as set forth in 35 U.S.C. 101. Accordingly, the claims do not recite statutory

subject matter.

Applicant may obviate the rejection by cancelling the claims.

Regarding rejections under 35 U.S.C. § 103:

First, applicant asserts that the proposed combination [of Seyrat, and Mory]

when considered as a whole does not teach or suggest the claimed feature that, "_at_

least one inheritance relationship is described between an inheriting name space and

bequeathing name spaces," as recites in claim 1- (the remarks Page 10, second

paragraph, second sentence), because Seyrat is directed solely to encoding method for

enabling a decoder to decode a structured document and teaches suing identifiers of a

used schema for coding a particular element data type (the remarks Page 10, second

paragraph, first sentence).

For purposes of responding to Appellant's argument, the examiner will assume

that the Appellant is arguing for the patentability of Claim 1.

The Examiner disagrees.

As discuss above and in previously presented Office Action mailed 09/04/2008.

As recognized by the Examiner, **Seyrat** discloses a **_MPEG-7 decoder_** comprises a

schema compilator designed to receive and process schemas such as XML schemas.

To **decode/encoded xml documents**, each complex type defines in the processes

schema is transformed into a finite state automaton expressing the complex type coding

rules. The input encoded document 7 is applied to the decoder in the form of a binary

stream on which the binary syntax code is executed using **type inheritances** and in

solving the **Namespace support**. This phase generates a realized schema. The second

phase consists in **generating a syntax tree** from each complex type. This is generally

disclosed at [Para 0090 through 0092 and Figure 2 and 2a of Seyrat]. In addition, the

Examiner noted the Specification expressly states, "The term *"name space" is hereafter*

used as a synonym for the term "schema"_" (see Page 2, Paragraph 0007, third

sentence).

Thus, Seyrat clearly disclosed the inheritance relationship is described between

an inheriting name space and bequeathing name spaces, as recited in claim 1.

Second, applicant asserts that the proposed combination [of Seyrat, and Mory]

when considered as a whole does not teach or suggest the claimed feature that "

allocating the plurality of codes for types defined by name spaces," as recites in claim 1-

(the remarks Page 10, third paragraph, third sentence), because Seyrat's MPEG-7

decoder 10 obtains binary syntax code 13 that is executed to decode encoded

documents (the remarks Page 10, third paragraph, first sentence).

For purposes of responding to Appellant's argument, the examiner will assume

that the Appellant is arguing for the patentability of Claim 1.

The Examiner disagrees.

As discuss above and in previously presented Office Action mailed 09/04/2008.

As recognized by the Examiner, **Seyrat** discloses the input encoded document 7 is

applied to the decoder in the form of *a binary stream* on which the binary syntax code

is executed using *type inheritances* and in solving the *Namespace support*. This

phase generates a realized schema 15. The second phase consists in *generating a*

syntax tree from each complex type [*type inheritances*]. This is generally disclosed at

[Para 0090 through 0092 and Figure 2 and 2a of Seyrat]. Also Seyrat further disclosed

schema identifiers are defined by a schema identifier dictionary which is known from the

decoder, for example inserted in the header 2 of the encoded document or inserted in a

decoder initialization and configuration file used by the decoder. This *schema identifier*

dictionary contains *all possible schema identifiers* [e.g., allocating the appropriate

schema for decoding and encoding] that are to be used by the decoder to decode the

encoded documents received. This dictionary can be read by the decoder using the

following binary syntax [see Seyrat at Para 105-107]. In addition, the Examiner noted

the Specification expressly states, "The term *"name space" is hereafter used as a*

synonym for the term "schema"." (see Page 2, Paragraph 0007, third sentence).

Thus, Seyrat clearly disclosed allocating the plurality of codes for types defined

by name spaces, as recited in claim 1.

In addition, for further clarification the Examiner would like to point out that **Mory** also disclosed a method for ***encoding/decoding*** XML like document which is an instance of ***XML-like schema using table derived from said schema, said table containing identification information for solely identifying each description element*** in a hierarchical level, and structural information for retrieving any child description element from its parent description element, and scanning a hierarchical memory representation of the instance from parent description elements to child description elements until reaching the description element to be encoded, and retrieving the identification information of each scanned description element, encoding said description element to be encoded as a fragment comprising said content and a sequence of the retrieved identification information [e.g., ***allocating the codes types utilized XML-like schema***]. Applications: XML; XML-schema; MPEG-7 [e.g., generating a plurality of codes using at least one namespace]. See Mory at the Abstract and at page 3 paragraph 55 through page 5 paragraph 85 also at table 1→table 3.

Accordingly, based upon all the above evidence, thus Seyrat and Mory clearly disclose all the limitation of claims 1-23 and 25-27 and provided proper reasons to combine. Thus claims 1-23 and 25-27 remain rejected at least at this time.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Quoc A. Tran whose telephone number is 571-272-

8664. The examiner can normally be reached on Monday through Friday from 9 AM to

5 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Doug Hutton can be reached on 571-272-4137. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

/Quoc A. Tran/
Examiner, Art Unit 2176

/DOUG HUTTON/
Supervisory Patent Examiner, Art Unit 2176